

Appl. No. : **Unknown**
Filed : **Herewith**

AMENDMENTS TO THE CLAIMS

1. **(Original)** An engineered fibre reinforced cement product including a first major surface to which a carbonation reducing sealer is applied and a second generally opposing major surface to which a carbonation reducing sealer is applied, so as to reduce propensity for differential carbonation in the product.

2. **(Original)** A product according to Claim 1, wherein a carbonation reducing sealer is applied to substantially all surfaces of the product.

3. **(Currently Amended)** A product according to Claim 1 ~~or claim 2~~, wherein the carbonation reducing sealer applied to at least one of said first and second major surfaces is a radiation curable sealer.

4. **(Canceled)**

5. **(Currently Amended)** A product according to ~~any one of the preceding claims~~ **Claim 1**, wherein the sealer applied to at least one of said first and second major surfaces is thermally, air or chemically curable.

6. **(Currently Amended)** A product according to ~~any one of the preceding claims~~ **Claim 1**, wherein the sealer applied to at least one of said first and second major surfaces is composed substantially of a formulation selected from the group comprising: acrylics; epoxy acrylates, and urethane acrylate sealers.

7. **(Currently Amended)** A product according to ~~any one of the preceding claims~~ **Claim 1**, wherein the sealer applied to at least one of said first and second major surfaces includes an integral adhesion promoting formulation.

8. **(Canceled)**

9. **(Canceled)**

10. **(Currently Amended)** A product according to ~~any one of the preceding claims~~ **Claim 1**, wherein the sealer applied to at least one of said first and second major surfaces includes an adhesive formulation adapted to enhance bonding of a topcoat.

11. **(Currently Amended)** A product according to ~~any one of the preceding claims~~ **Claim 1**, wherein the sealer applied to at least one of said first and second major surfaces is covered by a separate keycoat adapted to enhance bonding of a topcoat.

12. **(Canceled)**

Appl. No. : Unknown
Filed : Herewith

13. (Currently Amended) A product according to ~~any one of the preceding claims~~ Claim 1, wherein the sealer applied to each of the major surfaces is between 15 microns and around 80 microns in overall thickness.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Currently Amended) A product according to ~~any one of the preceding claims~~ Claim 1, wherein the carbonation reducing sealer is substantially alkali resistant.

20. (Currently Amended) A product according to ~~any one of the preceding claims~~ Claim 1, wherein the carbonation reducing sealer is sufficiently cross-linked to impede migration of carbon dioxide through the sealer to a predetermined extend.

21. (Canceled)

22. (Canceled)

23. (Currently Amended) A product according to Claim ~~22-1~~, wherein the sealer has a cement to silica ratio of between 0.2 and around 1.5 on a dry weight basis.

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Currently Amended) A product according to ~~any one of claims 22 to 28~~ Claim 1, having a porosity of between 30% and around 60%.

30. (Canceled)

31. (Currently Amended) A product according to ~~any one of claims 22 to 30~~ Claim 1, having a relative density of between 0.5 and around 2.0

32. (Canceled)

33. (Canceled)

34. (Canceled)

Appl. No. : Unknown
Filed : Herewith

35. (Currently Amended) A product according to ~~any one of the preceding claims~~ Claim 1, being a fibre reinforced cement sheet product configured by use as an exterior cladding panel.

36. (Canceled)

37. (Currently Amended) A product according to Claim 35 ~~or Claim 36~~, wherein the first major surface of the sheet product is a mounting surface adapted for inward orientation toward a substrate and the second major surface of the sheet product is an exposed surface adapted for outward orientation.

38. (Original) A method of manufacturing a durable fibre reinforced cement product, said method comprising steps of:

- (a) mixing a web fibre reinforced cement formulation;
- (b) forming from said formulation a green product defining first and second generally opposing major surfaces;
- (c) curing the green product to form a cured product; and
- (d) applying a carbonation reducing sealer to said first and second major surfaces, so as to reduce propensity for differential carbonation in the product.

39. (Canceled)

40. (Currently Amended) A method according to Claim 38 ~~or Claim 39~~, wherein the carbonation reducing sealer applied to at least one of said first and second major surfaces is a radiation curable sealer.

41. (Canceled)

42. (Canceled)

43. (Currently Amended) A method according to ~~any one of claims 38 to 42~~ Claim 38, wherein the sealer applied to at least one of said first and second major surfaces is selected from the group comprising: acrylics; epoxy, acrylates, and urethane acrylate sealers.

44. (Currently Amended) A method according to ~~any one of claims 38 to 43~~ Claim 38, wherein the sealer applied to at least one of said first and second major surfaces includes an integral adhesion promoting composition.

45. (Canceled)

Appl. No. : Unknown
Filed : Herewith

46. (Canceled)

47. (Currently Amended) A method according to ~~any one of claims 38 to 46~~ Claim 38, wherein the curing step is performed using a process selected from the group comprising: autoclave, air and steam curing.

48. (Currently Amended) A method according to ~~any one of claims 38 to 47~~ Claim 38, wherein the product is a sheet product configured for use as an exterior cladding panel.

49. (Canceled)

50. (Currently Amended) A method according to Claim ~~50 48 or Claim 49~~, wherein the first major surface of the sheet product is a mounting surface adapted for inward orientation toward a substrate and the second major surface of the sheet product is an exposed surface adapted for outward orientation.

51. (Original) A method according to Claim 50, wherein the substrate is a supporting frame.

52. (Original) A method according to ~~any one of claims 38 to 51~~ Claim 38, wherein one or more of the chemical composition of the formulation, method of manufacture, and physical structure of the cured product, are selected to reduce propensity for carbonation in the product.

53. (Original) A method according to Claim 52, including the further step of compressing said green product prior to curing in a controlled manner such that the cured product exhibits a reduced carbonation gradient.

54. (Currently Amended) A method according to ~~any one of claims 50 to 53~~ Claim 50, wherein the cured product has a porosity of between 30% and around 60%.

55. (Canceled)

56. (Currently Amended) A method according to ~~any one of claims 50 to 55~~ Claim 50, wherein the cured product has a relative density of between 0.5 and around 2.0.

57. (Canceled)

58. (Currently Amended) A method according to ~~any one of claims 50 to 57~~ Claim 50, wherein said wet fibre reinforced cement formulation has a cement to silica ratio of between 0.2 and around 1.5 on a dry weight basis.

Appl. No. : **Unknown**
Filed : **Herewith**

59. (Canceled)

60. (Canceled)

61. (Canceled)

62. (Canceled)

63. (Canceled)

64. (Canceled)

65. (Currently Amended) A method according to ~~any one of claims 38 to 64~~ Claim 38, wherein the carbonation reducing sealer is applied in multiple coats or stages.

66. (Canceled)

67. (Canceled)

68. (Canceled)

69. (Currently Amended) A method according to ~~any one of claims 38 to 68~~ Claim 38, wherein the carbonation reducing sealer applied to at least one of the major surfaces is cured in multiple stages.

70. (Original) A method according to Claim 69, including the further step of applying a keycoat over the sealer following partial curing and prior to full curing, to enhance bonding between the sealer and the keycoat.

71. (Original) A method according to Claim 69 or Claim 70, including the further step of applying a topcoat over the sealer following partial curing and prior to full curing, to enhance bonding between the sealer and the topcoat.

72. (Original) An engineered fibre reinforced cement product including a first major surface with a reduced propensity to differential carbonation, wherein the product has a cement to silica ratio of between 0.29 and around 0.51 and a porosity of between 25% and around 45%.

73. (Original) A product according to Claim 72, including a major surface to which a carbonation reducing sealer is applied.

74. (Original) A product according to Claim 73, wherein a carbonation reducing sealer is applied to substantially all surfaces of the product.

75. (Original) A product according to Claim 73 or Claim 74, wherein the carbonation reducing sealer is a radiation curable sealer.